

## WEST Search History

Hide Items

Restore

Clear

Cancel

DATE: Tuesday, April 13, 2004

Hide?	Set Name	Query	Hit Count
		<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; PLUR=YES; OP=AND</i>	
<input type="checkbox"/>	L1	haynes.in. and arrington.in.	4
<input type="checkbox"/>	L2	arrington.in.	245
<input type="checkbox"/>	L3	L2 and adjuvant	8
<input type="checkbox"/>	L4	L3 not l1	5
<input type="checkbox"/>	L5	L3 not l1	5
<input type="checkbox"/>	L6	L2 and cholera not l3	0
<input type="checkbox"/>	L7	L2 and nucleic not l3	1
<input type="checkbox"/>	L8	haynes.in. and nucleic not l3 not l4 not l5 not l6 not l7	48
<input type="checkbox"/>	L9	L8 not l1	48
<input type="checkbox"/>	L10	L9 and cholera	3
<input type="checkbox"/>	L11	L9 and cholera	3
<input type="checkbox"/>	L12	haynes.in. and joel	46
<input type="checkbox"/>	L13	('5439809' '5985641' 'EP000174759A1' '5912338' '5571712' '5972659' '6200959' '5849475' '6291227' '5866137' 'WO009317706A1' 'WO009746253A2')!.PN.	15
<input type="checkbox"/>	L14	('5439809' '5985641' 'EP000174759A1' '5912338' '5571712' '5972659' '6200959' '5849475' '6291227' '5866137' 'WO009317706A1' 'WO009746253A2')!.PN.	15
<input type="checkbox"/>	L15	('5439809' '5985641' 'EP000174759A1' '5912338' '5571712' '5972659' '6200959' '5849475' '6291227' '5866137' 'WO009317706A1' 'WO009746253A2')!.PN.	15
<input type="checkbox"/>	L16	L15 and (terminal\$ or \$terminal)	13
<input type="checkbox"/>	L17	L16 and (signal or leader or secretion or truncated or truncation or deletion or removal or less or fragment or portion or domain or removed)	9
<input type="checkbox"/>	L18	L17 and (ct or lt or cholera or adp\$ or ribos\$)	1

END OF SEARCH HISTORY

[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 4 of 4 returned.**

- 
- ☐ 1. [20030162733](#). 26 Nov 01. 28 Aug 03. Nucleic acid adjuvants. [Haynes, Joel R.](#), et al. 514/44; 435/375 A61K048/00 C12N005/00.
- 
- ☐ 2. [WO003004055A2](#). 26 Nov 01. 16 Jan 03. NUCLEIC ACID ADJUVANTS. HAYNES, JOEL R, et al. A61K039/39; A61K048/00.
- 
- ☐ 3. [US20030162733A](#). New composition comprising first or second nucleic acid sequence, which is a truncated A or B subunit coding region obtained or derived from a bacterial ADP-ribosylating exotoxin, useful as a vaccine against bacterial infection. [ARRINGTON, J](#), et al. A61K048/00 C12N005/00.
- 
- ☐ 4. [WO2003004055A](#). New compositions comprising nucleic acid adjuvants, useful in immunization techniques, particularly for eliciting or enhancing an immune response against an antigen in a human. [ARRINGTON, J E](#), et al. A61K039/39 A61K048/00.
- 

[Generate Collection](#)[Print](#)

Terms	Documents
haynes.in. and arrington.in.	4

[Prev Page](#)[Next Page](#)[Go to Doc#](#)

---

Search Results - Record(s) 1 through 15 of 15 returned.

---

L13: Entry 1 of 15

File: USPT

Sep 18, 2001

US-PAT-NO: 6291227

DOCUMENT-IDENTIFIER: US 6291227 B1

TITLE: Nucleic acids containing modified human immunodeficiency virus genomes devoid of long terminal repeats encoding non-infectious, replication-deficient, immunogenic retrovirus-like particles

DATE-ISSUED: September 18, 2001

US-CL-CURRENT: 435/236; 424/188.1, 424/208.1, 435/235.1, 435/320.1, 536/23.72INT-CL: [07] C12 N 7/04

---

L13: Entry 2 of 15

File: USPT

Mar 13, 2001

US-PAT-NO: 6200959

DOCUMENT-IDENTIFIER: US 6200959 B1

TITLE: Genetic induction of anti-viral immune response and genetic vaccine for filovirus

DATE-ISSUED: March 13, 2001

US-CL-CURRENT: 514/44; 424/204.1, 424/489, 435/459INT-CL: [07] A61 K 39/12, A61 K 48/00, A61 K 9/14, C12 N 15/87

---

L13: Entry 3 of 15

File: USPT

Nov 16, 1999

US-PAT-NO: 5985641

DOCUMENT-IDENTIFIER: US 5985641 A

TITLE: Non-infectious, replication-impaired, immunogenic human immunodeficiency virus type 1 retrovirus-like particles with multiple genetic deficiencies

DATE-ISSUED: November 16, 1999

US-CL-CURRENT: 435/236; 424/188.1, 424/208.1, 435/320.1INT-CL: [06] C12 N 7/04, C12 N 15/00, A61 K 39/21

---

L13: Entry 4 of 15

File: USPT

Oct 26, 1999

US-PAT-NO: 5972659

DOCUMENT-IDENTIFIER: US 5972659 A

TITLE: Multispecific antigenic proteins

DATE-ISSUED: October 26, 1999

US-CL-CURRENT: 435/69.7; 435/252.33, 435/320.1, 435/471, 435/69.1, 435/69.3,  
435/71.1, 435/71.2, 435/91.4, 435/91.42

INT-CL: [06] C12 P 21/04

---

L13: Entry 5 of 15

File: USPT

Jun 15, 1999

US-PAT-NO: 5912338

DOCUMENT-IDENTIFIER: US 5912338 A

TITLE: Nucleic acids encoding self-assembled, non-infectious, non-replicating, immunogenic retrovirus-like particles comprising modified HIV genomes and chimeric envelope glycoproteins

DATE-ISSUED: June 15, 1999

US-CL-CURRENT: 536/23.72; 424/188.1, 424/199.1, 424/208.1, 435/236, 435/91.4

INT-CL: [06] C07 H 21/04

---

L13: Entry 6 of 15

File: USPT

Feb 2, 1999

US-PAT-NO: 5866137

DOCUMENT-IDENTIFIER: US 5866137 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Self-assembled, non-infectious, non-replicating; immunogenic retrovirus-like particles comprising modified HIV genomes devoid of long terminal repeats and chimeric envelope glycoproteins

DATE-ISSUED: February 2, 1999

US-CL-CURRENT: 424/199.1; 424/187.1, 424/188.1, 424/207.1, 424/208.1, 435/235.1,  
435/320.1

INT-CL: [06] A61 K 39/12, A61 K 39/21, C12 N 7/00, C12 N 7/01

---

L13: Entry 7 of 15

File: USPT

Dec 15, 1998

US-PAT-NO: 5849475

DOCUMENT-IDENTIFIER: US 5849475 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Immunoassay diagnostic kit containing antigens derived from self-assembled, non-infectious, non-replicating, immunogenic retrovirus-like particles comprising modified HIV genomes and chimeric envelope glycoproteins

DATE-ISSUED: December 15, 1998

US-CL-CURRENT: 435/5; 424/187.1, 424/188.1, 424/199.1, 424/202.1, 424/207.1,  
424/208.1, 435/235.1, 435/236, 435/320.1, 435/810, 435/975

INT-CL: [06] C12 Q 1/70, A61 K 39/21, A61 K 39/12, A61 K 39/295

---

L13: Entry 8 of 15

File: USPT

Nov 5, 1996

US-PAT-NO: 5571712

DOCUMENT-IDENTIFIER: US 5571712 A

TITLE: Non-infectious, replication defective, immunogenic HIV retrovirus-like particles produced from a recombinant HIV genome devoid of long terminal repeats

DATE-ISSUED: November 5, 1996

US-CL-CURRENT: 435/364; 424/188.1, 424/208.1, 435/320.1, 435/365, 435/69.3,  
536/23.72

INT-CL: [06] C12 P 21/06, A61 K 39/21, C07 H 21/04

---

L13: Entry 9 of 15

File: USPT

Aug 8, 1995

US-PAT-NO: 5439809

DOCUMENT-IDENTIFIER: US 5439809 A

TITLE: Non-infectious HIV particles lacking long terminal repeats

DATE-ISSUED: August 8, 1995

US-CL-CURRENT: 435/69.3; 424/184.1, 424/185.1, 424/186.1, 424/187.1, 424/188.1,  
424/204.1, 424/207.1, 424/208.1, 435/235.1, 435/236, 435/466, 435/69.1, 435/70.1,  
435/71.1, 435/974, 514/2, 530/350, 530/826, 536/23.1, 536/23.72

INT-CL: [06] A61 K 39/21, C12 N 15/49, C07 K 14/155

---

L13: Entry 10 of 15

File: DWPI

Mar 13, 2001

DERWENT-ACC-NO: 2001-280564

ABSTRACTED-PUB-NO: US 6200959B

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Inducing an immune response to a Marburg or Ebola virus involves delivering a genetic vaccine, which contains a genetic construct encoding antigenic determinants for filovirus, using a particle acceleration device

INT-CL (IPC): A61 K 9/14, A61 K 39/12, A61 K 48/00, C12 N 15/87

Derwent-CL (DC): B04, D16

CPI Codes: B04-E08; B04-F1100E; B14-A02; B14-G01; B14-S11A; D05-H07; D05-H10; D05-H12E;

---

L13: Entry 11 of 15

File: DWPI

Jun 15, 1999

DERWENT-ACC-NO: 1999-357220

ABSTRACTED-PUB-NO: US 5912338A

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunogenic retrovirus like particles comprising modified HIV genomes, useful as vaccines against HIV

INT-CL (IPC): C07 H 21/04

Derwent-CL (DC): B04, D16

CPI Codes: B04-E03F; B04-E08; B14-S11A; D05-H07; D05-H12C; D05-H12E; D05-H17C;

---

L13: Entry 12 of 15

File: DWPI

Feb 2, 1999

DERWENT-ACC-NO: 1999-141864

ABSTRACTED-PUB-NO: US 5866137A

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunogenic retrovirus-like particle - with chimeric HIV-1 envelope protein containing heterologous retroviral amino acid sequence

INT-CL (IPC): A61 K 39/12, A61 K 39/21, C12 N 7/00, C12 N 7/01

Derwent-CL (DC): B04, D16

CPI Codes: B04-E03F; B04-F11; B14-S11A; D05-H07;

---

L13: Entry 13 of 15

File: DWPI

Dec 15, 1998

DERWENT-ACC-NO: 1999-069713

ABSTRACTED-PUB-NO: US 5849475A

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunoassay diagnostic kit for detecting antibodies - comprising chimeric retrovirus-like particles

INT-CL (IPC): A61 K 39/12, A61 K 39/21, A61 K 39/295, C12 Q 1/70

Derwent-CL (DC): B04, D16

CPI Codes: B04-E01; B04-F1100E; B04-F11E; B04-G01; B11-C07A; B12-K04A; D05-H09; D05-H12F; D05-H17B5;

---

L13: Entry 14 of 15

File: DWPI

Sep 1, 2002

DERWENT-ACC-NO: 1991-148742

ABSTRACTED-PUB-NO: EP 495811B

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Recombinant immunogenic retrovirus - for use in vaccines and in immunoassay of aids, atll etc.

INT-CL (IPC): A61 K 39/21, C07 H 21/04, C07 K 14/15, C07 K 14/155, C12 N 7/00, C12 N 7/01, C12 N 7/04, C12 N 15/00, C12 N 15/09, C12 N 15/48, C12 N 15/49, C12 P 21/00, C12 P 21/06, C12 Q 1/70, G01 N 33/56, G01 N 33/569, C12 P 21/00, C12 R 1:91

Derwent-CL (DC): B04, D16

CPI Codes: B02-V02; B04-B04A5; B04-B04C1; D05-H07;

---

L13: Entry 15 of 15

File: DWPI

Mar 19, 1986

DERWENT-ACC-NO: 1986-077153

ABSTRACTED-PUB-NO: EP 174759A

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Multi:specific immunogenic protein - comprising a self-aggregating low mol. wt. carrier protein and a hapten portion

INT-CL (IPC): A61K 39/38, A61K 39/385, C07K 17/00, C07K 19/00, C12N 1/21, C12N 7/00, 7/00, C12N 15/00, C12N 15/09, C12P 21/02 , C12P 21/04, C12R 1/91, C12N 15/09, C12R 1/92, C12P 21/02, C12R 1/19, C12N 1/21, C12R 1/19

Derwent-CL (DC): B04, D16

CPI Codes: B02-V02; B04-B02B1; B04-B04A1; B04-B04A5; B04-B04C2; D05-C12; D05-H12;

---

[Previous Page](#)

[Next Page](#)

## Hit List

Clear	Generate Collection	Print	Fwd Refs	Bkwd Refs
Generate OACS				

Search Results - Record(s) 1 through 15 of 15 returned.

☐ 1. Document ID: US 6291227 B1

L14: Entry 1 of 15

File: USPT

Sep 18, 2001

US-PAT-NO: 6291227

DOCUMENT-IDENTIFIER: US 6291227 B1

TITLE: Nucleic acids containing modified human immunodeficiency virus genomes devoid of long terminal repeats encoding non-infectious, replication-deficient, immunogenic retrovirus-like particles

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Full	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	------

☐ 2. Document ID: US 6200959 B1

L14: Entry 2 of 15

File: USPT

Mar 13, 2001

US-PAT-NO: 6200959

DOCUMENT-IDENTIFIER: US 6200959 B1

TITLE: Genetic induction of anti-viral immune response and genetic vaccine for filovirus

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Full	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	------

☐ 3. Document ID: US 5985641 A

L14: Entry 3 of 15

File: USPT

Nov 16, 1999

US-PAT-NO: 5985641

DOCUMENT-IDENTIFIER: US 5985641 A

TITLE: Non-infectious, replication-impaired, immunogenic human immunodeficiency virus type 1 retrovirus-like particles with multiple genetic deficiencies

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	Full	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	------

☐ 4. Document ID: US 5972659 A

L14: Entry 4 of 15

File: USPT

Oct 26, 1999



US-PAT-NO: 5972659

DOCUMENT-IDENTIFIER: US 5972659 A

TITLE: Multispecific antigenic proteins

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FOUO	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 5. Document ID: US 5912338 A

L14: Entry 5 of 15

File: USPT

Jun 15, 1999

US-PAT-NO: 5912338

DOCUMENT-IDENTIFIER: US 5912338 A

TITLE: Nucleic acids encoding self-assembled, non-infectious, non-replicating, immunogenic retrovirus-like particles comprising modified HIV genomes and chimeric envelope glycoproteins

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FOUO	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 6. Document ID: US 5866137 A

L14: Entry 6 of 15

File: USPT

Feb 2, 1999

US-PAT-NO: 5866137

DOCUMENT-IDENTIFIER: US 5866137 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Self-assembled, non-infectious, non-replicating; immunogenic retrovirus-like particles comprising modified HIV genomes devoid of long terminal repeats and chimeric envelope glycoproteins

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FOUO	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 7. Document ID: US 5849475 A

L14: Entry 7 of 15

File: USPT

Dec 15, 1998

US-PAT-NO: 5849475

DOCUMENT-IDENTIFIER: US 5849475 A

**\*\* See image for Certificate of Correction \*\***

TITLE: Immunoassay diagnostic kit containing antigens derived from self-assembled, non-infectious, non-replicating, immunogenic retrovirus-like particles comprising modified HIV genomes and chimeric envelope glycoproteins

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	FOUO	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 8. Document ID: US 5571712 A

L14: Entry 8 of 15

File: USPT

Nov 5, 1996

US-PAT-NO: 5571712

DOCUMENT-IDENTIFIER: US 5571712 A

TITLE: Non-infectious, replication defective, immunogenic HIV retrovirus-like particles produced from a recombinant HIV genome devoid of long terminal repeats

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Publ	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	------

☐ 9. Document ID: US 5439809 A

L14: Entry 9 of 15

File: USPT

Aug 8, 1995

US-PAT-NO: 5439809

DOCUMENT-IDENTIFIER: US 5439809 A

TITLE: Non-infectious HIV particles lacking long terminal repeats

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Publ	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	------

☐ 10. Document ID: US 6200959 B1

L14: Entry 10 of 15

File: DWPI

Mar 13, 2001

DERWENT-ACC-NO: 2001-280564

DERWENT-WEEK: 200129

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Inducing an immune response to a Marburg or Ebola virus involves delivering a genetic vaccine, which contains a genetic construct encoding antigenic determinants for filovirus, using a particle acceleration device

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Publ	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	------

☐ 11. Document ID: US 5912338 A

L14: Entry 11 of 15

File: DWPI

Jun 15, 1999

DERWENT-ACC-NO: 1999-357220

DERWENT-WEEK: 200001

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunogenic retrovirus like particles comprising modified HIV genomes, useful as vaccines against HIV

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Publ	Draw
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	------

☐ 12. Document ID: US 5866137 A

L14: Entry 12 of 15

File: DWPI

Feb 2, 1999

DERWENT-ACC-NO: 1999-141864

DERWENT-WEEK: 200010

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunogenic retrovirus-like particle - with chimeric HIV-1 envelope protein containing heterologous retroviral amino acid sequence

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	PMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 13. Document ID: US 5849475 A

L14: Entry 13 of 15

File: DWPI

Dec 15, 1998

DERWENT-ACC-NO: 1999-069713

DERWENT-WEEK: 200001

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Immunoassay diagnostic kit for detecting antibodies - comprising chimeric retrovirus-like particles

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	PMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 14. Document ID: ES 2171156 T3, WO 9105864 A, EP 495811 A1, JP 04506301 W, US 5439809 A, JP 2537570 B2, US 5571712 A, US 5985641 A, CA 2067333 C, US 6291227 B1, EP 495811 B1, DE 69033896 E

L14: Entry 14 of 15

File: DWPI

Sep 1, 2002

DERWENT-ACC-NO: 1991-148742

DERWENT-WEEK: 200264

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Recombinant immunogenic retrovirus - for use in vaccines and in immunoassay of aids, atll etc.

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	PMOC	Draw De
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	---------

☐ 15. Document ID: EP 174759 A, CA 1340776 C, JP 61143327 A, EP 174759 B, DE 3582380 G, JP 2528815 B2, US 5972659 A

L14: Entry 15 of 15

File: DWPI

Mar 19, 1986

DERWENT-ACC-NO: 1986-077153

DERWENT-WEEK: 200007

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Multi:specific immunogenic protein - comprising a self-aggregating low mol. wt. carrier protein and a hapten portion

Full	Title	Citation	Front	Review	Classification	Date	Reference			Claims	Excl	Draw	Doc
------	-------	----------	-------	--------	----------------	------	-----------	--	--	--------	------	------	-----

[Clear](#)[Generate Collection](#)[Print](#)[Fwd Refs](#)[Bkwd Refs](#)[Generate OACS](#)

Terms	Documents
haynes.in. and joel	15

Display Format: [Change Format](#)[Previous Page](#)[Next Page](#)[Go to Doc#](#)

First Hit

L1: Entry 1 of 4

File: PGPB

Aug 28, 2003

PGPUB-DOCUMENT-NUMBER: 20030162733  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20030162733 A1

TITLE: Nucleic acid adjuvants

PUBLICATION-DATE: August 28, 2003

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Haynes, Joel R.	Madison	WI	US	
Arrington, Joshua	Madison	WI	US	

APPL-NO: 09/ 993307 [PALM]  
DATE FILED: November 26, 2001

## RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/253381, filed November 27, 2000,

INT-CL: [07] A61 K 48/00, C12 N 5/00

US-CL-PUBLISHED: 514/44; 435/375

US-CL-CURRENT: 514/44; 435/375

REPRESENTATIVE-FIGURES: NONE

## ABSTRACT:

Recombinant nucleic acid molecules are described. The molecules have two nucleic acid sequences, wherein the first nucleic acid sequence is a truncated A subunit coding region obtained or derived from a bacterial ADP-ribosylating exotoxin, and the second nucleic acid sequence is a truncated B subunit coding region. Vectors and compositions containing these molecules are also described. Methods for enhancing an immune response against an antigen of interest using these recombinant nucleic acid molecules and compositions are also described.

## CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application is related to U.S. provisional application serial No. 60/253,381, filed Nov. 27, 2000, from which priority is claimed pursuant to 35 U.S.C. .sctn.119(e)(1) and which application is incorporated herein by reference in its entirety.

First Hit**End of Result Set**

L10: Entry 3 of 3

File: PGPB

Nov 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020165176  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020165176 A1

TITLE: Nucleic acid immunization

PUBLICATION-DATE: November 7, 2002

## INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Haynes, Joel R.	Madison	WI	US	
Macklin, Michael D.	Madison	WI	US	
Payne, Lendon G.	Madison	WI	US	

APPL-NO: 09/ 846091 [PALM]  
DATE FILED: April 30, 2001

## RELATED-US-APPL-DATA:

Application is a non-provisional-of-provisional application 60/200968, filed May 1, 2000,  
Application is a non-provisional-of-provisional application 60/210580, filed June 8, 2000,

INT-CL: [07] A61 K 48/00

US-CL-PUBLISHED: 514/44  
US-CL-CURRENT: 514/44

REPRESENTATIVE-FIGURES: NONE

## ABSTRACT:

Recombinant nucleic acid molecules are described. The molecules have a sequence or sequences encoding an influenza virus M2 antigen. Vectors and compositions containing these molecules are also described. Methods for eliciting an immune response using these molecules and compositions are also described.

## CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is related to U.S. provisional application serial No. 60/200,968, filed May 1, 2000, and U.S. provisional application serial No. 60/210,580, filed Jun. 8, 2000, from which applications priority is claimed pursuant to 35 U.S.C. .sctn.119(e) (1) and which applications are incorporated herein by reference in their entirety.